

## LSU Northeast Research Station

Weed control in rice with Valor.

Trial ID: SJ05R011  
Location:Study Dir.:  
Investigator: Bill Williams**GENERAL TRIAL INFORMATION****Investigator:** Bill Williams**Conducted Under GLP (Y/N):** N**Conducted Under GEP (Y/N):** N

**Conclusions:** Postemergence applications of Valor alone did not control sesbania or Texasweed. Sesbania and Texasweed control was improved when COC or NIS was added to postemergence Valor applications. However, these treatments also injured rice. Overall, the best rice tolerance and weed control was observed when Valor was applied preemergence through spike.

**CROP AND WEED DESCRIPTION**

Weed Code	Common Name	Scientific Name
1.	COMDI Barnyardgrass, common	Commelina diffusa
2.	CNPPA Texasweed	Caperonia palustris
3.	SEBEX Coffeebean	Sesbania exaltata
4.	ECHCG Barnyardgrass, common	Echinochloa crus-galli
5.	CYPCP Annual sedge	Cyperus compressus

**Crop 1:** ORYSA RICE**Variety:** Cocodrie**Planting Date:** 5/5/05**Planting Method:** DRILLED**Rate:** 90 LB/A**Depth:** 0.25 IN**Row Spacing:** 8 IN**Spacing Within Row:** 5 FT**Seed Bed:** MEDIUM**Soil Moisture:** DRY**Emergence Date:** 5/15/05**SITE AND DESIGN****Plot Width, Unit:** 6.67 FT**Plot Length, Unit:** 15 FT**Reps:** 3**Site Type:** RICE PADDY**Tillage Type:** CONVENTIONAL-TILL**Study Design:** RANDOMIZED COMPLETE BLOCK**SOIL DESCRIPTION**

% Sand: 24

% OM: 2.11

**Texture:** Clay

% Silt: 34

pH: 7.94

**Soil Name:** Sharkey

% Clay: 42

CEC: 21.9

**Fert. Level:** EXCELLENT

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**MOISTURE CONDITIONS**

	Date	Time	Amount	Unit	Type	Interval	Unit
1.	5/7/05	1:00 PM	3	in	Flush	0	n/a
2.	5/10/05	6:30 PM	0.25	in	Rainfall	0	n/a
3.	5/13/05	1:00 PM	3	in	Flush	0	n/a
4.	5/15/05	5:30 PM	0.46	in	Rainfall	0	n/a
5.	5/25/05	8:00 PM	0.78	in	Rainfall	0	n/a
6.	5/29/05	1:00 AM	0.63	in	Rainfall	0	n/a
7.	5/30/05	11:00 A	1.51	in	Rainfall	0	n/a
8.	5/31/05	8:00 PM	0.26	in	Rainfall	0	n/a
9.	6/2/05	4:00 PM	0.04	in	Rainfall	0	n/a
10.	6/6/05	7:00 PM	0.39	in	Rainfall	0	n/a
11.	6/9/05	1:00 PM	3	in	300 lb Urea fb Permanent flood	0	n/a
12.	6/18/05	11:00 A	0.42	in	Rainfall	0	n/a
13.	7/3/05	6:00 PM	0.06	in	Rainfall	0	n/a
14.	7/6/05	1:30 PM	1.6	in	Rainfall	0	n/a
15.	7/8/05	1:45 PM	0.93	in	Rainfall	0	n/a
16.	7/10/05	1:00 PM	0.04	in	Rainfall	0	n/a
17.	7/14/05	2:00 PM	0.44	in	Rainfall	0	n/a
18.	7/16/05	10:00 P	0.04	in	Rainfall	0	n/a
19.	7/17/05	1:00 PM	0.25	in	Rainfall	0	n/a
20.	7/18/05	7:00 PM	0.05	in	Rainfall	0	n/a
21.	7/22/05	2:30 PM	0.15	in	Rainfall	0	n/a
22.	8/4/05	3:30 PM	0.27	in	Rainfall	0	n/a
23.	8/5/05	8:00 PM	0.45	in	Rainfall	0	n/a
24.	8/6/05	6:00 PM	0.25	in	Rainfall	0	n/a
25.	8/16/05	6:00 PM	1.31	in	Rainfall	0	n/a
26.	8/22/05	9:00 PM	0.05	in	Rainfall	0	n/a

**Overall Moisture Conditions:** NORMAL

**Closest Weather Station:** Northeast Research Station

**Distance:** 0.25 **Unit:** MI

**APPLICATION DESCRIPTION**

	A	B	C	D	E	F
<b>Application Date:</b>	5/6/05	5/10/05	5/13/05	5/18/05	5/31/05	6/6/05
<b>Time of Day:</b>	4:00	1:30	10:30	3:00	10:00	2:00
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	DPRE	SPIKE	EPOST	POST	LPOST
<b>Applic. Placement:</b>	BANSOI	BANSOI	BROFOL	BROFOL	BROFOL	BROFOL
<b>Air Temp., Unit:</b>	69 F	93 F	87 F	91 F	76 F	87 F
<b>% Relative Humidity:</b>	39	48	44	63	81	74
<b>Wind Velocity, Unit:</b>	3 NW	1 W	0 na	5 S	8 NE	5 W
<b>Dew Presence (Y/N):</b>	N	N	N	N	N	N
<b>Soil Temp., Unit:</b>	71 F	89 F	82 F	97 F	71 F	86 F
<b>Soil Moisture:</b>	DRY	WET	WET	DRY	WET	DAMP
<b>% Cloud Cover:</b>	0	0	40	50	90	100

**CROP STAGE AT EACH APPLICATION**

	A	B	C	D
<b>Crop 1 Code, Stage:</b>	ORYSA n/a	ORYSA n/a	ORYSA spike	ORYSA 2-3
<b>Stage Scale:</b>	n/a	n/a	0.5 in	2-3 in
<b>Crop 1 Code, Stage:</b>	ORYSA 4-5 lf	ORYSA 3 till		
<b>Stage Scale:</b>	6-8 in	8-10 in		

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**WEED STAGE AT EACH APPLICATION**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Weed 1 Code, Stage:</b>	COMDI n/a	COMDI n/a	COMDI n/a	COMDI n/a
<b>Stage Scale:</b>	n/a	n/a	n/a	n/a
<b>Weed 2 Code, Stage:</b>	CNPPA n/a	CNPPA n/a	CNPPA n/a	CNPPA n/a
<b>Stage Scale:</b>	n/a	n/a	n/a	n/a
<b>Weed 3 Code, Stage:</b>	SEBEX n/a	SEBEX n/a	SEBEX n/a	SEBEX 1-2 lf
<b>Stage Scale:</b>	n/a	n/a	n/a	2-3 in
<b>Weed 4 Code, Stage:</b>	ECHCG n/a	ECHCG n/a	ECHCG n/a	ECHCG 1-2 lf
<b>Stage Scale:</b>	n/a	n/a	n/a	1-2 in
<b>Weed 5 Code, Stage:</b>	CYPCP n/a	CYPCP n/a	CYPCP n/a	CYPCP n/a
<b>Stage Scale:</b>	n/a	n/a	n/a	n/a
	<b>E</b>	<b>F</b>		
<b>Weed 1 Code, Stage:</b>	COMDI n/a	COMDI 3 lf		
<b>Stage Scale:</b>	n/a	3 in		
<b>Weed 2 Code, Stage:</b>	CNPPA n/a	CNPPA 5 lf		
<b>Stage Scale:</b>	n/a	6-8 in		
<b>Weed 3 Code, Stage:</b>	SEBEX n/a	SEBEX 8-9 lf		
<b>Stage Scale:</b>	n/a	8-10 in		
<b>Weed 4 Code, Stage:</b>	ECHCG n/a	ECHCG 2-3 T		
<b>Stage Scale:</b>	n/a	6-7 in		
<b>Weed 5 Code, Stage:</b>	CYPCP n/a	CYPCP 2 lf		
<b>Stage Scale:</b>	n/a	1 in		

**APPLICATION EQUIPMENT**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Appl. Equipment:</b>	Backpack	Backpack	Backpack		
<b>Operating Pressure:</b>	31	31	31		
<b>Nozzle Type:</b>	Greenleaf	Greenleaf	Greenleaf		
<b>Nozzle Size:</b>	11002	11002	11002		
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN		
<b>Nozzles/Row:</b>	4	4	4		
<b>Carrier:</b>	Water	Water	Water		
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA		
<b>Propellant:</b>	CO2	CO2	CO2		

**F**

**Appl. Equipment:**  
**Operating Pressure:**  
**Nozzle Type:**  
**Nozzle Size:**  
**Nozzle Spacing, Unit:**  
**Nozzles/Row:**  
**Carrier:**  
**Spray Volume, Unit:**  
**Propellant:**

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Weed control in rice with Valor.

Trial ID: SJ05R011  
 Location:

Study Dir.:  
 Investigator: Bill Williams

Weed Code	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX			
Crop Code								
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%			
Rating Date	5/26/05	6/24/05	7/12/05	8/10/05	5/26/05			
Trt-Eval Interval	8 DA-D	18 DA-F	36 DA-F	65 DA-F	8 DA-D			
Trt Treatment	Rate	Grow						
No. Name	Rate Unit	Stg	1	2	3	4	5	
1	Untreated		0	f 0	c 0	e 0	d 0	h
2	Command 1.3	PT/A PRE	90	bcd 83	ab 83	ab 70	bc 0	h
3	Command 1.3	PT/A PRE	90	bcd 82	ab 83	ab 70	bc 0	h
	Valor SX 2	OZ/A EPOST						
4	Command 1.3	PT/A PRE	90	bcd 83	ab 83	ab 70	bc 0	h
	Valor SX 2	OZ/A POST						
5	Command 1.3	PT/A PRE	90	bcd 87	a 83	ab 70	bc 0	h
	Valor SX 2	OZ/A LPOST						
6	Command 1.3	PT/A PRE	92	abc 83	ab 87	a 70	bc 83	def
	Valor SX 2	OZ/A EPOST						
	COC 1	PT/A EPOST						
7	Command 1.3	PT/A PRE	90	bcd 80	ab 80	ab 77	ab 92	abc
	Valor SX 2	OZ/A EPOST						
	NIS 0.25	% V/V EPOST						
8	Command 1.3	PT/A PRE	82	e 77	b 77	bc 77	ab 63	g
	Valor SX 2	OZ/A PRE						
9	Command 1.3	PT/A PRE	87	d 80	ab 80	ab 77	ab 87	cde
	Valor SX 4	OZ/A PRE						
10	Command 1.3	PT/A DPRE	92	abc 80	ab 80	ab 77	ab 80	f
	Valor SX 2	OZ/A DPRE						
11	Command 1.3	PT/A DPRE	90	bcd 80	ab 80	ab 77	ab 82	ef
	Valor SX 4	OZ/A DPRE						
12	Command 1.3	PT/A SPIKE	92	abc 82	ab 82	ab 82	a 88	bcd
	Valor SX 2	OZ/A SPIKE						
13	Command 1.3	PT/A SPIKE	90	bcd 77	b 67	d 63	c 92	abc
	Valor SX 4	OZ/A SPIKE						
14	Facet 8	OZ/A SPIKE	95	a 77	b 67	d 63	c 95	a
	Valor SX 2	OZ/A SPIKE						
	COC 1.25	% V/V SPIKE						
15	Facet 8	OZ/A SPIKE	93	ab 80	ab 70	cd 67	c 93	ab
	Valor SX 4	OZ/A SPIKE						
	COC 1.25	% V/V SPIKE						

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Weed Code	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	5/26/05	6/24/05	7/12/05	8/10/05	5/26/05
Trt-Eval Interval	8 DA-D	18 DA-F	36 DA-F	65 DA-F	8 DA-D
Trt Treatment	Rate	Grow			
No. Name	Rate Unit	Stg	1	2	3
16 Facet	8 OZ/A	SPIKE	88	cd 80	ab 70
Command	1.3 PT/A	SPIKE			cd 67
Valor SX	2 OZ/A	SPIKE			c 92
COC	1.25 % V/V	SPIKE			abc
LSD (P=.05)			4.2	6.7	7.1
Bartlett's X2			2.586	2.072	1.104
P(Bartlett's X2)			0.92	0.979	0.998
					0.999
					0.759

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Weed Code				SEBEX	SEBEX	SEBEX	CNPPA	CNPPA
Crop Code								
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%
Rating Date				6/24/05	7/12/05	8/10/05	5/26/05	6/24/05
Trt-Eval Interval				18 DA-F	36 DA-F	65 DA-F	8 DA-D	18 DA-F
Trt No.	Treatment Name	Rate	Grow Stg	6	7	8	9	10
1	Untreated			0	h 0	e 0	d 0	d 0 d
2	Command	1.3 PT/A	PRE	0	h 0	e 0	d 0	d 0 d
3	Command	1.3 PT/A	PRE	0	h 0	e 0	d 0	d 0 d
	Valor SX	2 OZ/A	EPOST					
4	Command	1.3 PT/A	PRE	0	h 0	e 0	d 0	d 0 d
	Valor SX	2 OZ/A	POST					
5	Command	1.3 PT/A	PRE	27	g 0	e 0	d 0	d 0 d
	Valor SX	2 OZ/A	LPOST					
6	Command	1.3 PT/A	PRE	73	cd 70	bc 63	b 85	abc 83 b
	Valor SX	2 OZ/A	EPOST					
	COC	1 PT/A	EPOST					
7	Command	1.3 PT/A	PRE	63	ef 0	e 0	d 0	d 0 d
	Valor SX	2 OZ/A	EPOST					
	NIS	0.25 % V/V	EPOST					
8	Command	1.3 PT/A	PRE	0	h 0	e 0	d 0	d 0 d
	Valor SX	2 OZ/A	PRE					
9	Command	1.3 PT/A	PRE	73	cd 63	c 57	b 83	bc 80 c
	Valor SX	4 OZ/A	PRE					
10	Command	1.3 PT/A	DPRE	57	f 0	e 0	d 80	c 80 c
	Valor SX	2 OZ/A	DPRE					
11	Command	1.3 PT/A	DPRE	62	ef 22	d 22	c 85	abc 80 c
	Valor SX	4 OZ/A	DPRE					
12	Command	1.3 PT/A	SPIKE	63	ef 67	bc 60	b 88	ab 80 c
	Valor SX	2 OZ/A	SPIKE					
13	Command	1.3 PT/A	SPIKE	80	bc 80	ab 80	a 85	abc 80 c
	Valor SX	4 OZ/A	SPIKE					
14	Facet	8 OZ/A	SPIKE	67	de 70	bc 63	b 90	ab 80 c
	Valor SX	2 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					
15	Facet	8 OZ/A	SPIKE	88	a 88	a 88	a 92	a 90 a
	Valor SX	4 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					



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Weed Code	CNPPA	CNPPA	ORYSA	ORYSA	ORYSA			
Crop Code	PLATOT P	PLATOT P	STAND C	PLATOT C	PLATOT C			
Part Rated	CONTROL	CONTROL	Reduction	PHYGEN	PHYGEN			
Rating Data Type	%	%	%	%	%			
Rating Unit	7/12/05	8/10/05	5/26/05	4/13/05	5/17/05			
Trt-Eval Interval	36 DA-F	65 DA-F	8 DA-D					
Trt No.	Treatment Name	Rate	Grow Stg	11	12	13	14	15
1	Untreated			0	b 0	d 0	a 0	a 0 a
2	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
3	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
	Valor SX	2 OZ/A	EPOST					
4	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
	Valor SX	2 OZ/A	POST					
5	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
	Valor SX	2 OZ/A	LPOST					
6	Command	1.3 PT/A	PRE	80	a 70	c 0	a 0	a 0 a
	Valor SX	2 OZ/A	EPOST					
	COC	1 PT/A	EPOST					
7	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
	Valor SX	2 OZ/A	EPOST					
	NIS	0.25 % V/V	EPOST					
8	Command	1.3 PT/A	PRE	0	b 0	d 0	a 0	a 0 a
	Valor SX	2 OZ/A	PRE					
9	Command	1.3 PT/A	PRE	80	a 70	c 2	a 0	a 0 a
	Valor SX	4 OZ/A	PRE					
10	Command	1.3 PT/A	DPRE	80	a 70	c 2	a 0	a 0 a
	Valor SX	2 OZ/A	DPRE					
11	Command	1.3 PT/A	DPRE	80	a 70	c 2	a 0	a 0 a
	Valor SX	4 OZ/A	DPRE					
12	Command	1.3 PT/A	SPIKE	80	a 77	b 2	a 0	a 0 a
	Valor SX	2 OZ/A	SPIKE					
13	Command	1.3 PT/A	SPIKE	80	a 80	a 2	a 0	a 0 a
	Valor SX	4 OZ/A	SPIKE					
14	Facet	8 OZ/A	SPIKE	80	a 80	a 10	a 0	a 0 a
	Valor SX	2 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					
15	Facet	8 OZ/A	SPIKE	80	a 80	a 5	a 0	a 0 a
	Valor SX	4 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					

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Weed Code	CNPPA	CNPPA	ORYSA	ORYSA	ORYSA
Crop Code	PLATOT P	PLATOT P	STAND C	PLATOT C	PLATOT C
Part Rated	CONTROL	CONTROL	Reduction	PHYGEN	PHYGEN
Rating Data Type	CONTROL	CONTROL	Reduction	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Rating Date	7/12/05	8/10/05	5/26/05	4/13/05	5/17/05
Trt-Eval Interval	36 DA-F	65 DA-F	8 DA-D		
Trt Treatment	Rate	Grow			
No. Name	Rate Unit	Stg	11	12	13
16 Facet	8 OZ/A	SPIKE	80	a 80	a 2
Command	1.3 PT/A	SPIKE			a 0
Valor SX	2 OZ/A	SPIKE			a 0
COC	1.25 % V/V	SPIKE			a
LSD (P=.05)			0.0	2.4	5.4
Bartlett's X2			0.0	0.0	7.647
P(Bartlett's X2)			.	.	0.365

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Weed Code								
Crop Code				ORYSA	ORYSA	ORYSA	ORYSA	
Part Rated				PLATOT C	PLATOT C	PLATOT C	PLATOT C	
Rating Data Type				PHYGEN	PHYGEN	PHYGEN	PHYGEN	
Rating Unit				%	%	%	%	
Rating Date				5/20/05	5/26/05	6/13/05	6/20/05	
Trt-Eval Interval				8 DA-D				
Trt No.	Treatment Name	Rate	Grow Stg	16	17	18	19	
1	Untreated			0	c 0	a 0	a 0	a
2	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
3	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	EPOST					
4	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	POST					
5	Command	1.3 PT/A	PRE	32	a 0	a 0	a 0	a
	Valor SX	2 OZ/A	LPOST					
6	Command	1.3 PT/A	PRE	15	b 0	a 0	a 0	a
	Valor SX	2 OZ/A	EPOST					
	COC	1 PT/A	EPOST					
7	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	EPOST					
	NIS	0.25 % V/V	EPOST					
8	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	PRE					
9	Command	1.3 PT/A	PRE	0	c 0	a 0	a 0	a
	Valor SX	4 OZ/A	PRE					
10	Command	1.3 PT/A	DPRE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	DPRE					
11	Command	1.3 PT/A	DPRE	0	c 0	a 0	a 0	a
	Valor SX	4 OZ/A	DPRE					
12	Command	1.3 PT/A	SPIKE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	SPIKE					
13	Command	1.3 PT/A	SPIKE	0	c 0	a 0	a 0	a
	Valor SX	4 OZ/A	SPIKE					
14	Facet	8 OZ/A	SPIKE	0	c 0	a 0	a 0	a
	Valor SX	2 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					
15	Facet	8 OZ/A	SPIKE	0	c 0	a 0	a 0	a
	Valor SX	4 OZ/A	SPIKE					
	COC	1.25 % V/V	SPIKE					

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Weed Code								
Crop Code				ORYSA	ORYSA	ORYSA	ORYSA	
Part Rated				PLATOT C	PLATOT C	PLATOT C	PLATOT C	
Rating Data Type				PHYGEN	PHYGEN	PHYGEN	PHYGEN	
Rating Unit				%	%	%	%	
Rating Date				5/20/05	5/26/05	6/13/05	6/20/05	
Trt-Eval Interval				8 DA-D				
Trt	Treatment	Rate	Grow					
No.	Name	Rate	Unit	Stg	16	17	18	19
16	Facet	8	OZ/A	SPIKE	0	c 0	a 0	a 0
	Command	1.3	PT/A	SPIKE				a
	Valor	SX 2	OZ/A	SPIKE				
	COC	1.25	% V/V	SPIKE				
LSD (P=.05)					3.9	0.0	0.0	0.0
Bartlett's X2					0.343	0.0	0.0	0.0
P(Bartlett's X2)					0.558	.	.	.

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.